#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003572 Address: 333 Burma Road **Date Inspected:** 03-Aug-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Fu Yu Hong No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

## Bay 2 "New OBG Assembly Area"

OBG Assembly Segment 5AE- The Caltrans QA Inspector observed that ZPMC is in process of FCAW the CJP splice weld that joins the C5 side plate to the D6 bottom plate. ZPMC personnel were observed applying heat with the use of ceramic thermal devices for a significant portion of this shift.

OBG Assembly Segment 3BW- The Caltrans QA Inspector observed that ZPMC excavating for a UT weld repair at the weld joint # SEG-015B-002.

OBG Assembly Segment 5BE. The Caltrans QA Inspector observed that ZPMC was performing UT verifications to the weld joint # SEG-024A-032. The CJP splice weld that joins the C5 side plate to the D6 bottom plate.

OBG Corner Assembling- The Caltrans QA inspector observed ZPMC performing assembling operations on the corner plates assembling CASD4B and CASD5B.

OBG Assembly Segments 3AE and 4AE- The Caltrans QA inspector performed UT verifications at the floor beam connections longitudinal stiffeners to floor beams, floor beams FL2 to FL1 connections weld joints: SEG-014B, -004, SEG-014C-003, SEG-014B-006, SEG-018B-135, SEG-018B-135, SEG-018C-003, SEG-018C-018,

SEG-018B-017 and SEG-018C-019. Welds appeared to be in compliance with the contract documents.

## **OBG-Deck Assembly Panel**

ZPMC performed approximately 20 mm buttering at the edge plates EP017B and EP005B on the SPCM member on the entire length (4984 mm) which exceeded the maximum allow of 4.5 mm (18 mm thick plate) as per section

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

12.17.2 for non critical repairs to correct length or weld geometric. The QA inspector had a conversation with ZPMC representative Zhan Jiadi Ken and ABF representative, Li Man Kit. The QA inspector brought to Mr. Zhan and Mr. Li attention that ZPMC performed approximately 20 mm buttering at the edge plates EP017B and EP005B on the siscmic performance critical member (SPCM) without Engineer approval. The QA inspector added that the QA was going to recommend the issue of non conformance report regarding to this matter.



### **Summary of Conversations:**

As noted above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 858 344-8746, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer